AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1-6.   (canceled)

7. (Currently Amended) A method of recording a video sequence having a first video frame and a second video frame ~~that is non-sequential with respect to the first video frame~~, comprising:

    providing a <u>random access</u> memory having a plurality of memory locations corresponding to a plurality of memory addresses;

    using a linked list to ~~select~~ <u>allocate</u> different first and second ~~sets~~ <u>regions, each region comprising</u> ~~of~~ contiguous ones of the memory ~~addresses~~<u>locations,</u> where the first ~~set~~ <u>region</u> and the second ~~set~~ <u>region</u> ~~of addresses~~ are ~~non-contiguous~~<u>separated by at least one intervening region of memory locations</u>;

    compressing the first and the second video frames into a first variable sized compressed frame and a second variable size compressed frame having a different size than the first compressed frame;

    writing the first compressed frame to a first memory location having a first memory address within the first ~~selected set~~<u>region</u>, and writing the second compressed frame to a second memory location having a second memory address within the second ~~selected set~~<u>region</u>;

    storing a first <u>frame address</u> and second frame ~~addresses~~ in ~~an~~ <u>a frame</u> index corresponding to the first and second memory addresses <u>in the first and second regions</u>, respectively, where the compressed frames are written; and

    <u>allowing</u> ~~cueing~~ the second video frame <u>to be cued</u> within a single frame latency time while playing back the first video frame <u>from the first region</u> by obtaining the second frame address from the <u>frame</u> index, <u>retrieving the second compressed frame from the second region.</u> ~~and~~ decompressing the second compressed frame ~~stored at the second memory location.~~<u>, and playing back the second video frame.</u>

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8. (Currently Amended) The method of recording of claim 7, wherein the frame index identifies the first and second compressed frames using at least one of frame number, time, and date.

9. (Previously Presented) The method of recording of claim 7, wherein the first frame address to which the first compressed frame is written is a start address for a video clip.

10. (Currently Amended) The method of recording of claim 7, wherein the step of using the linked list to select allocate the sets regions of memory addresses locations comprises selecting identifying a largest one of the setsregions.

11. (Currently Amended) The method of recording of claim 7, wherein the frame index comprises an frame index table stored in a random access memory.

12. (Currently Amended) The method of recording of claim 11, further comprising protecting the first compressed frame from being overwritten by a third variable sized compressed frame via writing the third compressed frame at a memory location corresponding to at least one of the memory addresses of the first selected set regions other than the first frame address.

13-16. (canceled)

17. (Previously Presented) The method of recording of claim 7, further comprising looping the memory by creating additional compressed frames from subsequent video frames of the video sequence, and overwriting the first compressed frame with one of the additional compressed frames having a size different from that of the first compressed frame at the first memory location.

18. (Currently Amended) A method of storing and playing back a video recording having 1 though n variable length video frames, where n is at least 9 comprising:

    storing each of the n video frames in n different memory locations, respectively,

    using a random access frame index to store pointers to each of the n memory locations;

    using the frame index to directly locate, access, decompress, and playback any individual
        ones of the n video frames out of sequence within a single frame latency time
        while playing back any one of the other video frames.